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Mouth Hygiene and Child Welfare

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THE problem of the mouth is to possess a mouth which is clean and which can function, as it is intended to function. A dirty mouth contaminates all food taken into the body. Pure food, at whatever cost of care and money in its production and preparation, becomes impure food when taken into the body through a filthy mouth. To function properly the mouth must be clean and there must be sound and usable teeth and the teeth must be used. They must be used to prepare food for digestion and they must be used, much used, on hard and chewable food to develop the teeth, the jaws, the face, the skull and the brain cavity.

The mouth problem is a part of the problem of health promotion. Mouth hygiene is one of the items of a health promotion program. Like other items, each in its proper field, the broad aim of mouth hygiene is to develop and maintain proper teeth. This includes the preparation of food for digestion by the proper use of the teeth. For food which is not properly prepared and digested, decays in the stomach and intestines, where are found the best possible conditions for quick decay—darkness, moisture, heat. If, in addition, the food is mixed in the mouth with pus from pyorrhea pockets, with bacteria from decayed teeth, from food previously left among the teeth and from diseased gums, it decays the more quickly.

While mouth hygiene is but one of the items of a health promotion program, it is a big and definite item, and it is tied up with several other problems, such as prenatal care, nutrition

and infections of the body. But it is not a panacea. It must be worked out in connection with other health promotion problems.

THE STATISTICS OF THE MOUTH

The statistics are well known and need not be covered in detail. It is enough to say that one may with difficulty find two good sets of teeth in each hundred children examined in our schools, including only the first five grades. If all grades are examined the proportion of good mouths will be less. In Stratford, Connecticut, five hundred and fifty children were examined and only one child was found to have teeth free from decay. And not only has each child one decayed tooth; he has, on the average, seven decayed teeth.

What is the meaning of this condition? Before the arrival of the civilized white man the Eskimos had no words for decayed teeth or toothache. They now have use for the words, just as we have. Tooth decay is largely unknown among the primitive peoples, such as in the north of Scotland, in Norway and Sweden, in the rural districts of Italy, and several similar areas. And the decay is attributed not to the power to read and write, not to the power to think, but to denaturized foods and to failure to use the power to think. Our overwhelming tooth trouble is due to foolish or ignorant parents and to the food manufacturers. It is due to the products and conditions of civilization, especially civilization's foods. Denaturized foods, haste, with its consequent faulty mastication, do not produce teeth.

MOUTH INFECTION AND HEALTH

Along with poor teeth, decayed teeth and dirty mouths comes a whole chain of evil consequences, induced diseases and related ills. Autointoxication, a quite respectable disease, is in some cases a fashionable name for a body full of decayed food. Rheumatism is in many cases the name given to local infections due to pyorrhea pockets. Malnutrition is often due to the fact that the teeth cannot prepare food for the digestive fluids. The after results of a poor mouth, results which are not commonly connected with the condition of the mouth, are now well known to the leaders of the dental and medical professions. These results are so extensive in their various ramifications that they are beginning to form a great specialty in dentistry and medicine. They complicate diagnosis, broaden the range of treatment required and greatly add to the burden of curative treatment. They involve not merely a study of possible break in the enamel of the teeth; rather, as Fones says: "Today we realize that dentistry must concentrate upon the soft tissues, the gums, the pericementum and the pulp, for these are the tissues chiefly involved in permitting the ingress of bacteria into the lymphatics and thus in the production of many systemic infections."

The trend of the times is toward a toothless age. But progress towards this condition need not continue. We know, in the main, the precedent causes of most of the bad conditions. We know at least enough to make it a truism that if we further progress towards a toothless age it is because we are at the same time progressing in senselessness. We know that we can give up some of our bad habits or continue to give up our teeth. The unfor-

tunate aspect of the matter just now is that our bad habits have a stronger hold on us than have our teeth. There is a job ahead for every promoter of a health program, for every citizen worthy of the name.

The present and future welfare of every child is inseparably tied up with the condition of his mouth and teeth. Upon this, frequently upon this alone, depends comfort, appearance, general health and efficiency of the individual. Malocclusion alone, induced by faulty care of the temporary teeth, malnutrition, thumb sucking, pacifiers, etc., ruins the appearance of the individual, causes mouth breathing, prevents mastication and develops a secondary chain of results which are ghastly and inexcusable. Thus follows a round of difficulties in part hinted at and too numerous to be even catalogued in a short article.

Mental retardation, induced by all the conditions above mentioned, is so terrific in its effects on the individual and in its costs, direct and secondary, to the child and the community, that one would think mere knowledge of the facts would prompt speedy action. Yet there is probably but one city in the country, Bridgeport, Connecticut, which has made a serious attempt at actually meeting the conditions.

THE SOLUTION—A PROGRAM

As in all matters of health promotion, the development of a program has come in backwards. Dental surgery, a means of patching up bad teeth to do as well as they may, has made great progress, nowhere more than in America. The developments of the past twenty years speak volumes for the ability and the earnestness of the leaders of the dental profession. And the work has been ably seconded by leaders in the medical profession.

But dental surgery is devoted to

cure. It does not and cannot, alone, promote good teeth. It should be in the nature of a supplementary activity to a program for promoting healthy mouths. There are less than fifty thousand dentists in the country. To pursue the course now mainly followed, using dentists only when the teeth are troublesome, would require the services of an army of perhaps three hundred thousand dentists and they would then be unable actually to get under the problem. We shall always need the dentist, far more than we now think we need him, but he will need help. With a right program the dentist could give the required attention to the sixth year molars, could treat decay in its early and painless stages and could function more effectively than we now permit.

The next item to develop was mouth hygiene. This is largely a preventive activity and its need is largely induced by failure in the fundamental work. Mouth hygiene is a development of the past ten years. In 1914 the first mouth hygienists were graduated. Their work, under the direction of Dr. Fones and of private dentists in various places, was so significant that the movement produced a complete revolution in dentistry. This change is only now in progress. Thirteen states have recognized it by making it legal for mouth hygienists to practice. Like modern dentistry, it is making rapid strides and will prove of almost unlimited value in the campaign for health promotion.

TOOTH BUILDING AND MAINTENANCE

Let us lay down as one of the fundamentals that right mouth conditions will be promoted most effectively by a program of tooth building and maintenance. Dental surgery is curative. Mouth hygiene is preventive, but it can easily be made constructive, that

is, by aiming directly at maintaining good teeth in a good condition. But the big item of the program, because the only one which can accomplish the task before us, is tooth building and maintenance. In this work there are three main items.

PRENATAL CARE, NUTRITION AND MOUTH HYGIENE

First comes prenatal care. This is important because the enamel of the temporary teeth and, to some degree, of the permanent teeth is formed in the prenatal period. This will be good enamel or poor enamel, depending upon the condition of the mother during the period of pregnancy. It was formerly considered normal for a mother to give up some of her teeth at the birth of a child. This was due to plain ignorance. The growing organism will take all it can get, at whatever sacrifice to the parent organism. But it is possible to rob the mother and still not supply the needs of the growing child. Prenatal care is therefore imperative to the welfare of the mother and child. Every child has a right to be born fit. No mother should suffer abnormal injury through giving birth to a child. Right conditions at birth go a long way in solving the problems of child welfare and promoting the interests of the individual.

Then comes the item of nutrition. Having started the teeth in the right way, the next thing is to keep them growing properly in every way until they are fully formed. This is largely a problem of nutrition. So nearly is it a problem of nutrition that if we were to solve the nutrition problem we should be a long way on the road to a solution of the tooth problem. But nutrition depends upon the condition of the teeth. Without good teeth the individual cannot prepare food for digestion. So here we have two in-

separable problems. To promote one and ignore the other, is to fail.

Free sugar and starch form the base of the tooth problem from the nutritional standpoint and on the negative side. Lactic acid, the destroyer of enamel, comes from sugar and from starch converted into dextrose. On the positive side, the development of the teeth depends upon a "well balanced diet, with special emphasis on the calcium content foods."

Mouth hygiene, which includes the prophylactic processes plus full instruction in regard to the care of the mouth, as well as instruction as to foods which will produce teeth and warning against foods which destroy teeth, is imperative in both the constructive and remedial campaigns and is, or should be, within itself both constructive and preventive. It forms the great bridge which will lead us from the present morass of difficulties to the solid ground of right living which will mean good teeth, first, last and between.

We shall probably never use enough of the foods which polish the teeth. So the hygienist must polish them, thus keeping them free from the bacteria plaques which start decay. The hygienist must remove the tartar or teach us to avoid, when someone finds what they are, the foods which produce it. And he must teach us, always teach us, till we reach that position where we individually feed ourselves and our children with the same care used in feeding cattle or in supplying automobiles with fuel and oil. We keep function in mind in every case except when feeding (and clothing) ourselves.

The profession of mouth hygiene offers a field of usefulness hardly sur-

passed among the professions. Its importance cannot be overstated. Its significance grows upon us from day to day as we study the situation in which we find ourselves and the possibilities of mouth hygiene as a remedy.

We have poor teeth and we know the cause. We know that to promote tooth health is cheaper and more effective than cure. We know that we will not be able to provide and maintain enough dentists to care for the problem by curative processes. There are those who insist that the tooth problem, as it now faces us, is more serious, responsible for more ills, than was liquor before prohibition. We also know that the tooth problem is tied up with our food habits and that food habits are as difficult to change as other habits. They are perhaps more difficult, for, while it is a besetting crime in the eyes of many to poison the body with whiskey, it is not so considered when we fill the stomach with food doomed only to decay and thus to ruin health. And we have to eat.

Let us keep in mind, therefore, the seriousness of the problem and the need for action by parents, teachers, dentists, hygienists, doctors, the press; by everyone who forms a contact and who would claim to influence people. For if the influence springing from a contact is not good, it is nothing or it is bad. Who is going to claim the right of a contact, which is also an opportunity, when it produces only harm?

Mouth hygiene deals with the care and use of the mouth and the teeth. Its progress during ten years gives it a distinct and permanent field. To those who will deal with mouth hygiene in its broader aspects there is no more useful field for work.